Michigan Department of Transportation 5100B (07/07)

CHECKLIST TO DESIGNATE AREAS OF EVALUATION FOR REQUESTS FOR PROPOSAL (RFP)

Exhibit B

MDOT PROJECT MANAGER	JOB NUMBER (JN)	CONTROL SECTION (CS)
Lori Swanson		63022, 63191

DESCRIPTION IF NO JN/CS

Transportation study to develop a transportation improvement plan for the I-96/I-696/I-275 corridors in Novi and Wixom.

MDOT PROJECT MANAGER: Check all items to be included in RFP.

WHITE = REQUIRED
GRAY SHADING = OPTIONAL

Check the appropriate Tier in the box below

☐ **TIER I ($25,000-$99,999)**	☐ **TIER II ($100,000-$250,000)**	☒ **TIER III (>$250,000)**	**CONSULTANT:** Provide only checked items below in proposal.
☐	☐	☒	Understanding of Service
☐	☐	☐	*Innovations*
☐	☐	☐	*Safety Program*
N/A	☐	☒	Organization Chart
☐	☐	☒	Qualifications of Team
☐	☐	☒	Past Performance
Not required as part of official RFP	Not required as part of official RFP	☒	Quality Assurance/Quality Control
☐	☐	☒	**Location:** The percentage of work performed in Michigan will be used for all selections unless the project is for on-site inspection or survey activities, then location should be scored using the distance from the consultant office to the on-site inspection or survey activity.
N/A	N/A	☐	Presentation
N/A	N/A	☐	Technical Proposal (if Presentation is required)
3 pages (MDOT forms not counted) **(No Resumes)**	7 pages (MDOT forms not counted)	19 pages (MDOT forms not counted)	Total maximum pages for RFP **not including key personnel resumes**

REQUEST FOR PROPOSAL

The Michigan Department of Transportation (MDOT) is seeking professional services for the project contained in the attached scope of services.

If your firm is interested in providing services, please indicate your interest by submitting a Proposal, Proposal/Bid Sheet or Bid Sheet as indicated below. The documents must be submitted in accordance with the latest "Consultant/Vendor Selection Guidelines for Service Contracts" and "Guideline for Completing a Low Bid Sheet(s)", if a low bid is involved as part of the selection process. **Referenced Guidelines are available on MDOT's website under Doing Business > Vendor/Consultant Services >Vendor/Consultant Selections.**

RFP SPECIFIC INFORMATION

☑ BUREAU OF HIGHWAYS ☐ BUREAU OF TRANSPORTATION PLANNING ** ☐ OTHER

THE SERVICE WAS POSTED ON THE ANTICIPATED QUARTERLY REQUESTS FOR PROPOSALS

☑ NO ☐ YES DATED _____ THROUGH _____

☑ **Prequalified Services** – See page 2 of the attached Scope of Services for required Prequalification Classifications.

☐ **Non-Prequalified Services** - If selected, the vendor must make sure that current financial information, including labor rates, overhead computations, and financial statements, if overhead is not audited, is on file with MDOT's Office of Commission Audits. This information must be on file for the prime vendor and all sub vendors so that the contract will not be delayed.

☑ **Qualifications Based Selection** – Use Consultant/Vendor Selection Guidelines

For all Qualifications Based Selections, the section team will review the information submitted and will select the firm considered most qualified to perform the services based on the proposals. The selected vendor will be contacted to confirm capacity. Upon confirmation, that firm will be asked to prepare a priced proposal. Negotiations will be conducted with the firm selected.

****For RFP's that originate in Bureau of Transportation Planning only**, a priced proposal must be submitted at the same time as, but separate from, the proposal. Submit directly to the Contract Administrator/Selection Specialist, Bureau of Transportation Planning **(see address list, page 2)**. The priced proposal must be submitted in a sealed envelope, clearly marked **"PRICE PROPOSAL."** The vendor's name and return address MUST be on the front of the envelope. The priced proposal will only be opened for the highest scoring proposal. Unopened priced proposals will be returned to the unselected vendor(s). Failure to comply with this procedure may result in your priced proposal being opened erroneously by the mail room.

For a cost plus fixed fee contract, the selected vendor must have a cost accounting system to support a cost plus fixed fee contract. This type of system has a job-order cost accounting system for the recording and accumulation of costs incurred under its contracts. Each project is assigned a job number so that costs may be segregated and accumulated in the vendor's job-order accounting system.

☐ **Qualifications Review / Low Bid** - Use Consultant/Vendor Selection Guidelines. See Bid Sheet Instructions for additional information.

For Qualification Review/Low Bid selections, the selection team will review the proposals submitted and post the date of the bid opening on the MDOT website. The notification will be posted at least two business days prior to the bid opening. Only bids from vendors that meet proposal requirements will be opened. The vendor with the lowest bid will be selected. The selected vendor may be contacted to confirm capacity.

☐ **Best Value** - Use Consultant/Vendor Selection Guidelines. See Bid Sheet Instructions below for additional information. The bid amount is a component of the total proposal score, not the determining factor of the selection.

☐ **Low Bid** (no qualifications review required - no proposal required.) See Bid Sheet Instructions below for additional instructions.

BID SHEET INSTRUCTIONS

A bid sheet(s) must be submitted in accordance with the "Guideline for Completing a Low Bid Sheet(s)" (available on MDOT's website). The Bid Sheet(s) is located at the end of the Scope of Services. Submit bid sheet(s) separate from the proposal, to the address indicated below. The bid sheet(s) must be submitted in a sealed manila envelope, clearly marked **"SEALED BID."** The vendor's name and return address MUST be on the front of the envelope. Failure to comply with this procedure may result in your bid being opened erroneously by the mail room and the bid being rejected from consideration.

PROPOSAL SUBMITTAL INFORMATION

REQUIRED NUMBER OF COPIES FOR PROJECT MANAGER	PROPOSAL/BID DUE DATE	TIME DUE
4	4/3/09	4:00 pm

PROPOSAL AND BID SHEET MAILING ADDRESSES

Mail the multiple proposal bundle to the MDOT Project Manager or Other indicated below.

☑ MDOT Project Manager ☐ MDOT Other

Lori Swanson, P.E.
MDOT - Oakland TSC
2300 Dixie Hwy., Ste 300
Waterford, MI 48328

Mail one additional stapled copy of the proposal to the Lansing Office indicated below.

	Lansing Regular Mail	OR	Lansing Overnight Mail
☑	Secretary, Contract Services Div - B470 Michigan Department of Transportation PO Box 30050 Lansing, MI 48909		Secretary, Contract Services Div - B470 Michigan Department of Transportation 425 W. Ottawa Lansing, MI 48933
☐	Contract Administrator/Selection Specialist Bureau of Transportation Planning B470 Michigan Department of Transportation PO Box 30050 Lansing, MI 48909		Contract Administrator/Selection Specialist Bureau of Transportation Planning B470 Michigan Department of Transportation 425 W. Ottawa Lansing, MI 48933

GENERAL INFORMATION

Any questions relative to the scope of services must be submitted by e-mail to the MDOT Project Manager. Questions must be received by the Project Manager at least four (4) working days prior to the due date and time specified above. All questions and answers will be placed on the MDOT website as soon as possible after receipt of the questions, and at least three (3) days prior to the RFP due date deadline. The names of vendors submitting questions will not be disclosed.

MDOT is an equal opportunity employer and MDOT DBE firms are encouraged to apply. The participating DBE firm, as currently certified by MDOT's Office of Equal Opportunity, shall be listed in the Proposal

MDOT FORMS REQUIRED AS PART OF PROPOSAL SUBMISSION

5100D – Request for Proposal Cover Sheet
5100G – Certification of Availability of Key Personnel
5100I – Conflict of Interest Statement

(These forms are not included in the proposal maximum page count.)

Michigan Department of Transportation

SCOPE OF SERVICE
FOR
TRAFFIC AND SAFETY SERVICES

CONTROL SECTION(S): 63022, 63191

JOB NUMBER(S):

PROJECT LOCATION:
The project is located along the I-96/I-275 corridor bounded by Napier Road on the west, Haggerty Road on the east, Twelve Mile Road on the north, and Grand River Avenue on the south in the cities of Novi and Wixom, in Oakland County.

PROJECT DESCRIPTION:
Work involved in the development of a transportation improvement plan for the I-96 and I-275 corridor in the cities of Novi and Wixom in Oakland County. It is the intent of this plan to develop a prioritized list of projects in the study area that will improve safety and mobility on the transportation infrastructure. Based on this priority listing, the partner agencies will work together to revise the 25 year regional transportation plan for the study area to reflect the needs identified and the priorities set for each of those needs. The concept of an I-96 corridor study was developed from the desire of the cities of Novi and Wixom to improve traffic operations along the surface street network in the area of the I-96 and I-275 interchange, and to plan for future traffic growth within the study area. The purpose of the study is to identify deficiencies in the transportation network, both in 2008 under current conditions and in 2030 as development continues.

The overall project goal is to review the roadway network in the study area to determine and prioritize operational and safety improvements that can be made to the system. Included in this overall goal are the following objectives:

1. Evaluate all interchanges in the study area for potential operational and capacity improvements, as well as improved local connection.
2. Examine all north/south and east/west corridors in the study area for potential operational, safety and capacity improvements.
3. Evaluate access management opportunities along all corridors in the region, identifying corridors where a formal access management plan may be required.
4. Evaluate community land use plans within the study area and identify opportunities for improved coordination with roadway plans.
5. Evaluate major current and proposed developments in the study area to determine if planned roadway improvements will meet the growing traffic demands of these developments.
6. Evaluate transit and non-motorized transportation options in the study area as a means to reduce automobile demand.

To accomplish this overall project goal and associated objectives, a Project Team which includes the cities of Novi and Wixom, the Michigan Department of Transportation, the Road Commission for Oakland County, and the Southeast Michigan Council of Governments (SEMCOG) will be established.

ANTICIPATED SERVICE START DATE: May 4, 2009

ANTICIPATED SERVICE COMPLETION DATE: May 4, 2010

PRIMARY PREQUALIFICATION CLASSIFICATION(S):
Traffic Capacity Analysis and Geometric Studies

SECONDARY PREQUALIFICATION CLASSIFICATION(S):
Complex Traffic Signal Operations

DBE REQUIREMENT: N/A

MDOT PROJECT ENGINEER MANAGER:
Lori Swanson, P.E.
Cost and Scheduling Engineer
Oakland TSC
2300 Dixie Highway, Suite 300
Waterford, Michigan 48328
248-451-2456
248-451-0125
swansonl@michigan.gov

REQUIRED MDOT GUIDELINES AND STANDARDS:

Work shall conform to current MDOT, FHWA, and AASHTO practices, guidelines, policies, and standards (i.e., Road Design Manual, Standard Plans, Drainage Manual, Roadside Design Guide, A Policy on Geometric Design of Highways and Streets, Michigan Manual of Uniform Traffic Control Devices, etc.).

Consultant is required to use MDOT's current version of Bentley MicroStation for CADD applications. Consultant shall comply with all MDOT CADD standards and file naming conventions.

CONSULTANT RESPONSIBILITIES:

TASK 1 – INITIATE PROJECT

The Consultant shall prepare for and attend **Project Meeting #1 – Project Kick Off** with the Project Team to discuss the agreed upon scope of services, project schedule and organization of project communications and administrative tasks.

At the project kick off meeting, the Consultant will coordinate with Project Team to draft the transportation plan goals and objectives. The Consultant will use the goals from the current SEMCOG Regional Transportation Plan (RTP) as a basis for this discussion. The Consultant will also coordinate with Project Team to develop the evaluation criteria, performance measures, and prioritization methodology for evaluating transportation improvement scenarios and proposed projects.

The Project Team will provide the Consultant with the pertinent planning and transportation documents that have been published by Project Team members, committed transportation projects through 2030, existing and future capital funding sources for the State and County, available roadway functional classification, summary accident statistics, and locations of truck routes. The Project Team will also provide the Consultant with the available current daily traffic counts for roadways and intersections within the study area.

Following the project kick-off meeting, the Consultant will lead a public listening session, hosted by the Project Team, to allow residents and businesses to provide input in regard to their area of transportation concerns and suggestions.

Deliverables for this task will include:

1. A memorandum summarizing the results of the kick-off meeting
2. A memorandum documenting the results of the public listening session.

TASK 2- COLLECT DATA

Task 2.1- Meet with area Municipalities

The Consultant will prepare for and attend up to **six total meetings with road agencies and municipalities** located within the study area. Meetings are to be conducted for up to five agencies and municipalities to allow interaction to obtain opinions and to expedite the project schedule. The Consultant will coordinate with the Project Team regarding the schedule of these meetings and their participants.

The participating agencies will identify and provide to the Consultant information regarding major developments currently under development or planned to be developed by 2030 that may affect the transportation system. The attending agencies will also identify and provide information regarding plans to construct collector roadways (that are not on the County Highway system) and plans about

the development of bicycle/pedestrian facilities within their jurisdictions by 2030. The Consultant will record comments from the attending municipalities regarding their general concerns about the transportation network within the study area and identify common concerns. The Consultant will also meet with up to six private stakeholders to determine future land development plans within the study area. The Consultant will also obtain available information about transportation-related capital budgets, obtain and summarize traffic accident statistics, and local truck routes and travel patterns, as available. The Consultant will develop **Technical Memorandum #1** that summarizes the transportation concerns of municipalities and stakeholders within the study area.

After the Project Team members and each private stakeholder has been interviewed, and all relevant information collected, the Consultant shall meet with Project Manager to discuss findings and identify significant data gaps, if any. If it is determined that significant data gaps do exist, then the Consultant will work with the Project Team to develop a plan to acquire the additional required data, which may include manual peak hour turning movement counts at up to twelve locations.

Deliverables for this task will include:

1. **Technical Memorandum #1 –** a summary of the transportation concerns of the municipalities within the study area.

Task 2.2 – SEMCOG Traffic Demand Model

The Southeast Michigan Council of Governments (SEMCOG) will provide the Consultant with the 2030 Transcad model with the 2008 base year. The Consultant will also obtain and review the 2030 regional transportation plan from SEMCOG.

The Consultant will prepare for and attend **up to two (2) total meetings with SEMCOG:** to identify dataset availability, to formulate the method for transferring the datasets, to review and discuss the datasets, to clarify the datasets and assumptions used in developing trip tables, and to coordinate the findings and recommendations of the 2030 RTP with the developments of this project.

Task 2.3 – Contact Other Transportation Service Providers in Oakland County

The Consultant will coordinate with representatives from the following agencies to identify available current transportation projects, long range transportation plan documents, committed transportation projects through 2030, existing and future capital funding sources for transportation projects, summary accident statistics, existing and future transit facilities, existing and proposed bicycles/pedestrian facilities, and opinions about current and planned transportation operations within Oakland County for areas within Oakland County:

- Southeast Michigan Council of Governments (SEMCOG)
- SMART
- Road Commission for Oakland County (RCOC)
- MDOT

The Consultant will coordinate with local agencies to obtain current information and available GIS mapping related to local and sub-regional bicycle planning.

Task 2.4 - Finalize Goals, Objectives and Evaluation Methodology

The draft goals and objectives will be summarized and submitted to the Project Team for review and comment. Based on Project Team's comments on transportation, concerns of municipalities summarized in Technical Memorandum #1 and on the Project Team's comments on the draft goals and objectives, the Consultant will revise and finalize the transportation goals and objectives for the I-96 Corridor Plan, and summarize them in **Technical Memorandum #2**.

Likewise, the Consultant will develop, revise and finalize the evaluation, performance measures, and prioritization methodologies that will be used for ranking the transportation improvement projects identified in the I-96 Corridor Plan improvement alternatives that will be developed during Task 5. A summary of these methodologies will be developed in **Technical Memorandum #3**.

Deliverables for this task include:

1. **Technical Memorandum #2 –** I-96 Corridor Plan goals and objectives.
2. **Technical Memorandum #3** – I-96 Corridor Plan evaluation, performance measures, and prioritization methodologies.

Task 2.5 – Meet with the Project Team

The Consultant will present the information in Technical Memorandums #2 and #3 to the Project Team for their approval of the project's final goals and objectives. This will be **Project Meeting #2.**

Deliverables for this task will include:

1. Memorandum summarizing the results of Project Meeting #2.

TASK 3 – EVALUATE EXISTING CONDITIONS

The Consultant will perform travel demand modeling for the base 2008 roadway network. All travel demand modeling will be conducted using the current version of TransCAD geographic information system (GIS)-based software as of November 2008.

Task 3.1 – Review SEMCOG Model

The Consultant will produce a 2008 evening peak period forecast from the SEMCOG validated daily traffic model. This forecast will be developed as a secondary tool to allow a preliminary evaluation on intersection-specific deficiencies and corresponding alternatives that may be included in the proposed solution. The network and trip matrix used for this forecast will globally incorporate intersection impedances and SEMCOG generated factors for converting the daily trip tables into evening peak matrices. No specific validation effort will be conducted in developing this evening peak period forecast.

Task 3.2 – Determine 2008 Base Year Network Deficiencies

The Consultant will review Project Team meeting minutes and use Project Meeting 1 and 2, and the public listening session, to identify deficiencies. Deficiencies will also be identified using the 2008 base year network developed in the TransCAD model. The results of the deficiency analyses will be focused on freeway ramp terminals and County and local arterials and collectors in the study area.

Task 3.3 – Evaluate Existing Bicycle Travel Demand

Based on data obtained in Tasks 2.1 and 2.3, information obtained through meetings and discussions with local agencies, and identification of recognized bicycle destinations/attractions with Oakland County, a discussion and presentation to the Metro Region non-motorized task force, the SEMCOG Bicycle Travel Map, and using digital aerial photography, if available, supplied by Oakland County, the Consultant will determine the level of service for the existing Western Wayne County bicycle facilities. Any changes to the bicycle facility inventory should be conveyed to SEMCOG in an informal technical memorandum.

This assessment of the current level of service within Oakland County will be the basis for the development of the Future Bicycle Facility Improvements and Priorities Plan that takes into account whether the trail is separate or adjacent to a highway facility; within a residential, recreational, or commercial area; and the nature of the bike route itself (e.g., primary-through, recreational, municipal, etc.). This task will be based on qualitative assessment and quantitative evaluation of available published data and field observations, and not on a mode split analysis using the travel demand model.

Deliverables for this task include:

1. Memorandum to SEMCOG identifying any changes to the bicycle facility inventory.
2. Future Bicycle Facility Improvements and Priorities Plan

Task 3.4 – Summarize Collected Datasets and 2008 Deficiency Analysis

The Consultant will prepare **Technical Memorandum #4** that summarizes the existing conditions and operational deficiencies of the 2008 base-as-built roadway network and the current travel demands and system characteristics for bicycles in the study area. The Consultant will also review and summarize the accident statistics and truck route information, review and recommend revisions to functional class, and other information obtained in Tasks 1 and 2.

The Consultant will prepare for and conduct **Project Meeting #3** with the Project Team to summarize the performance and deficiencies of the existing transportation system.

Deliverables for this task will include:

1. **Technical Memorandum #4** – Summary of existing conditions and operational deficiencies.

Task 3.5– System operational review

The Consultant will perform an additional review of transportation system operations components of the transportation network within the study area. This review will include an inventory and assessment of the existing and programmed Intelligent Transportation System assets within the study area, a review of crash statistics, a review of truck routes within the study area, and any recommended revisions to the functional class of roadways within the study area.

TASK 4 - DEVELOP TRAVEL DEMAND FORECASTS

Task 4.1 – Review 2030 Travel Demand Networks

The Consultant will review the base roadway networks as a basis for simulating 2030 travel conditions (both daily and evening peak period forecast) with trip tables. Changes in the trip tables, based on changes in the development patterns and density due to known developments will be made by the Consultant.

Task 4.2 – Identify 2030 Network Deficiencies

The Consultant will analyze the 2030 traffic assignment based on the Existing plus Committed (E+C) networks and the 2030 socioeconomic and TAZ datasets obtained in Task 4.1. The Consultant will develop and use evaluation and roadway Level of Service (LOS) criteria established by the Project Team and the Consultant to identify transportation network deficiencies on each of the networks.

Task 4.3 – Forecast Bikeway Travel Demands and Deficiencies

The Consultant will review the bicycle travel demand developed in Task 3.3 and identify planned and programmed improvements to the bicycle facilities in the study area. The Consultant will also analyze the connectivity of the existing bicycle facilities network to locally recognized bicycle destinations/activity centers within the county. As part of the= connectivity study, a study of the physical barriers and impediments, such as geographical features, roadways, and developments that may impact the effectiveness of these connections will be analyzed. Based on the forecast residential, commercial, and activity center growth in the 2030 socioeconomic forecast, the Consultant will perform an assessment of the future county bicycle level of service in coordination with the Project Team in the study area.

Task 4.4 – Review 2030 Socioeconomic Forecast

The travel demand forecast for this study will be based on the 2030 socioeconomic forecast obtained from SEMCOG, the Consultant will coordinate with SEMCOG to obtain the 2030 socioeconomic forecast. The Consultant will review the 2030 socioeconomic forecast data with the Project Team members to determine if there are any changes or deficiencies that need to be addressed as part of the modeling effort. Any changes will be incorporated by the Consultant into the model as part of the deficiency analysis.

Task 4.5 – Summarize 2030 Transportation System Deficiencies

The Consultant will develop **Technical Memorandum #5** that summarizes the projected roadway, bicycle and transit demands and system deficiencies in 2030. The Consultant will prepare for and conduct **Project Meeting #4** with the Project Team members to discuss the 2030 transportation system forecast and projected deficiencies.

Deliverables for this task will include:

1. **Technical Memorandum #5** – Roadway, bicycle, transit demand and system deficiency summary
2. Memorandum summarizing the results of Project Meeting #4

TASK 5 – DEVELOP IMPROVEMENT SCENARIOS

Task 5.1 – Develop Alternative Operational and Roadway Improvement Scenarios

Based on the identification of deficient locations in Task 4.2, the Consultant will identify improvements to the Oakland County Year 2030 transportation network. Up to four transportation scenarios will be developed. The Consultant will work with the Project Team during **Project Meeting #5** to determine improvement scenarios and their resulting improvement measures which may include intelligent transportation systems strategies, integrated corridor management concepts, road widening, intersection improvements, etc.

Deliverables for this task will include:

1. Memorandum summarizing the results of Project Meeting #5

Task 5.2 – Develop Bicycle Improvement Scenarios

The Consultant will identify right-of-way corridors available to construct bicycle facilities (e.g., state roads, county highways, local roads and utility corridors over 60-ft in width), and roadways that may be feasible to accommodate bicycle facilities. Based on the deficiencies identified in Task 3.3 and the forecast bicycle demands from Task 4.3, the Consultant will develop a prioritized plan of future bicycle routes and greenways necessary to provide the required level of service for the a bicycle facilities network. These new improvements in conjunction with the existing county facilities will provide the framework of connectivity for a county-wide system functional classification bike plan consisting of trunk network, collectors, and municipal connectors.

Task 5.3 – Present to Project Team

The Consultant will prepare for and attend **Project Meeting #6** to present and discuss the improvement scenarios with the Project Team.

Deliverables for this task include:

1. Memorandum summarizing the results of Project Meeting #6.

Task 5.4 – Refine Transportation Alternatives

Based on comments received from the previous task, the Consultant will revise the alternative transportation scenarios in coordination with the Project Team members.

Task 5.5 – Develop Travel Demand Management Alternatives

Based on input from the project stakeholders, the Consultant will identify opportunities to mitigate traffic demand through modified land use plans, housing/employment balance, staggered work shifts, tele-commuting centers, ride sharing, access management and other innovative means to reduce the number of vehicles using the road system.

TASK 6 – EVALUATE ALTERNATIVE IMPROVEMENT SCENARIOS

Task 6.1 – Model Alternative Scenarios

The Consultant will develop a daily traffic assignment for each of the alternative roadway scenarios developed in Task 5 for the 2030 forecast year. The quantitative modeling of transportation improvement scenarios will be limited to proposed roadway improvements. Bicycle and transit alternative will not be modeled. The modeling results will be compared against the project's performance measures, as well as the goals and objectives. The Consultant will attend **Project Meeting #7** with Project Team members to discuss the results of the travel demand modeling, including their comparisons against the performance measures, of the six roadway improvement scenarios.

Deliverables for this task will include:

1. Memorandum summarizing the results of Project Meeting #7

Task 6.2 – Re-evaluate Alternative Scenarios

Based on a review of initial daily traffic assignments and Project Meeting #6, it may be determined that additional roadway improvement scenarios are desirable. If necessary, the Consultant will develop and model up to two additional roadway improvement scenarios. These additional two scenarios will likely be a combination or sub-set of the initial alternative scenarios.

Task 6.3 – Conduct Qualitative Evaluation of Alternate Modes

A qualitative review of transit, bicycle, pedestrian, or other modes will be conducted. This evaluation will be based on factors such as linkages to activity centers, regional paths, mode transfer centers, and other qualitative measures.

Task 6.4 – Conduct Social/Environmental Analysis

For each improvement scenario, the Consultant will perform a scoping level review of the scenarios. This analysis will involve a review of the scenarios based on available resource data (wetlands maps,

aerial photographs, USGS topography maps, including information from the Project Team, etc.). The results of this review will be to rank the various improvement scenarios with regard to acquisition of additional right-of-way, impact to the environment, and displacement of existing properties.

Task 6.5 – Estimate Cost of Proposed Improvements

The Consultant will estimate the engineering, right-of-way, and construction, implementation and operation/maintenance costs of the improvement scenarios. The Consultant will also identify potential funding sources for each of the projects to determine if the project meets the objectives of the CMAQ program or other funding source. The Consultant will develop **Technical Memorandum #6** that summarizes the results of the travel demand forecasting of alternative scenarios, as well as an evaluation of social and environmental issues associated with those scenarios. The Consultant will prepare for and attend **Project Meeting #8** and meet with the Project Team to review the technical memo.

Deliverables for this task include:

1. Technical Memorandum #6, travel demand forecasting results for alternative scenarios and evaluation of social or environmental issues of alternative scenarios.
2. Memorandum summarizing the results of Project Meeting #8.

TASK 7 – DEVELOP PREFERRED TRANSPORTATION ALTERNATIVE

Based on the results of the evaluation of analyses and performance measures in Task 6, and recommendations from the Project Team and their sponsors, the Consultant will develop in coordination with Project Team members, a preferred improvement scenario, including the roadway, bicycle, TDM, and intelligent transportation systems and operations improvements. This preferred scenario might include projects from various alternative scenarios. The Consultant will perform a final daily traffic assignment for the preferred roadway improvements.

Bicycle improvements, their prioritization, and the resulting bicycle facilities plan will be developed during this task. Where appropriate in the bicycle planning process, the Consultant will provide the level of detail described in the following steps (e.g., storm water evaluation, funding availability, etc.) to be included in the plan. The Consultant will also develop final capital cost estimates for the preferred improvement scenario. The final capital costs will include estimation and analysis of the storm water management requirements of the various improvement scenarios. Those requirements will be factored into the right-of-way and construction costs.

In coordination with Project Team members, the Consultant will develop a list of prioritized improvement projects within the preferred scenario taking into account estimated project costs, benefits and impacts for internal use by the Project Team. Additionally, the prioritized project listing should include which funding sources would be eligible for each specific project (e.g. CMAQ, transit, safety, etc.).

The prioritization process of the preferred alternative will occur at two levels. First relying upon the results of the daily travel demand modeling, and those results against the performance measures, the

projects will be prioritized into three categories: immediate, moderate, and long-term need. After these have been identified, the evening peak period forecast models will be used to help identify the priority of the projects within those needs using a specific performance measures to peak hour analysis.

The Consultant will conduct **Project Meeting #9** with the Project Team to develop the financial analysis and the prioritized list of improvements.

At the conclusion of Task 7, the Consultant will develop **Technical Memorandum #7 s**ummarizing the preferred roadway improvement scenario. This will include the list of the prioritized projects, funding strategy, and time line for implementing the improvements, as well as a summary of the social and environmental analyses that pertain to the prioritized list. Technical Memorandum #7 should also include the preferred Travel Demand Management scenario. **Technical Memorandum #8** will be prepared summarizing in similar fashion, the preferred bike and transit plan scenarios.

Deliverables for this task will include:

1. Memorandum summarizing the results of Project Meeting #9.
2. Technical Memorandum #7, preferred roadway improvement scenarios.
3. Technical Memorandum #8, preferred bike and transit plan scenarios.

TASK 8 – DOCUMENT PLAN

Task 8.1 – Document Project Technical Reports

The Consultant shall prepare a final report that includes the technical memorandums listed under the above-individual tasks. The Consultant will develop a draft 25 Year I-96 Corridor Operations and Safety Priority Program that documents the data collection, travel demand modeling, project technical memoranda, project meetings, alternative scenarios, selection of preferred scenario, and financially constrained analysis. A draft of the report will be presented to the Project Team, and a final review meeting will be held to discuss the team's review comments on the report.

Once finalized, the Consultant shall submit 5 bound copies and one unbound copy of the report to the Project Team. Based on comments received from Project Team members, the Consultant will revise and submit twenty bound copies and one unbound copy of the final report to the Project Team. The form of the transportation plan will be an executive summary map with a companion technical appendix document. An electronic copy of the final report will be provided to the Project Team for their future reproduction of the map and technical appendix.

The Consultant will provide a similar executive summary map, with companion technical appendix document, for the County Bicycle Facilities Plan. The Consultant will provide up to five copies of the draft and ten copes of a final report for Project Team use, in addition to one unbound copy of each plan.

The Consultant shall present the report and its findings and recommendations at one public meeting,

and at one meeting with the City of Novi City Council, and at one meeting with the City of Wixom City Council.

The Consultant will coordinate with the Project Team in the development of necessary travel demand modeling results and mapping to be incorporated into the SEMCOG GIS. This will include determining which GIS layers (i.e., travel demand volumes, bicycle plan, etc.) will need translation from TransCAD to the ArcVIEW/ArcINFO format.

SCHEDULE:

Task Description	Duration	Expected Completion Date
Initiate Project	1 month	5/4/09
Collect Data	2 months	7/1/09
Evaluate Existing Conditions	1 month	8/1/09
Develop Travel Demand Forecasts	2 months	10/1/09
Develop Improvement Scenarios	1 month	11/1/09
Evaluate Alternative Improvement Scenarios	1 month	12/1/09
Develop Preferred Transportation Alternative	1 month	1/1/10
Document Plan	2 months	3/1/10

The above schedule assumes an May 4, 2009 project start date. During the first task, a project initiation meeting will occur. At that time, a detailed Gantt chart will be presented for Project Team review.

The schedule above is provided as a recommendation based on the objectives of the Project Team. The Project Team would prefer an accelerated schedule if possible. The Consultant should provide an updated schedule based on their understanding of the scope of the project and knowledge of available data and information.

CONSULTANT PAYMENT – Actual Cost Plus Fixed Fee:

Compensation for this project shall be on an **actual cost plus fixed fee** basis. This basis of payment typically includes an estimate of labor hours by classification or employee, hourly labor rates, applied overhead, other direct costs, subConsultant costs, and applied fixed fee.

All billings for services must be directed to the Department and follow the current guidelines. The latest copy of the "Professional Engineering Service Reimbursement Guidelines for Bureau of Highways" is available on MDOT's website. This document contains instructions and forms that must be followed and used for billing. Payment may be delayed or decreased if the instructions are not followed.

Payment to the Consultant for services rendered shall not exceed the maximum amount unless an increase is approved in accordance with the contract with the Consultant. Typically, billings must be submitted within 60 days after the completion of services for the current billing. The final billing must be received within 60 days of the completion of services. Refer to your contract for your

specific contract terms.

Direct expenses, if applicable, will not be paid in excess of that allowed by the Department for its own employees in accordance with the State of Michigan's Standardized Travel Regulations. Supporting documentation must be submitted with the billing for all eligible expenses on the project in accordance with the Reimbursement Guidelines. The only hours that will be considered allowable charges for this contract are those that are directly attributable to the activities of this project.

The use of overtime hours is not acceptable unless prior written approval is granted by the MDOT Region Engineer/Bureau Director and the MDOT Project Manager. Reimbursement for overtime hours that are allowed will be limited to time spent on this project in excess of forty hours per person per week. Any variations to this rule should be included in the priced proposal submitted by the Consultant and must have prior written approval by the MDOT Region Engineer/Bureau Director and the MDOT Project Manager.

The fixed fee for profit allowed for this project is 11.0% of the cost of direct labor and overhead.